

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING  
DOCUMENT TRANSMITTED

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as designated Office

Date of mailing (day/month/year)

11 January 2001 (11.01.01)

International application No.

PCT/NO00/00090

International filing date (day/month/year)

15 March 2000 (15.03.00)

Applicant

HANSEN, Iver

The International Bureau transmits herewith the following documents and number thereof:

2

cop(ies) of priority document(s) (Rule 17.2(a))

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Athina Nickitas-Etienne

Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 23 January 2001 (23.01.01)	
<b>International application No.</b> PCT/NO00/00090	<b>Applicant's or agent's file reference</b>
<b>International filing date (day/month/year)</b> 15 March 2000 (15.03.00)	<b>Priority date (day/month/year)</b> 15 March 1999 (15.03.99)
<b>Applicant</b> HANSEN, Iver	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
 16 October 2001 (16.10.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☐ was

☒ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO          34, chemin des Colombettes          1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer          Athina Nickitas-Etienne</p> <p>Telephone No.: (41-22) 338.83.38</p>
--	--

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

HANSEN, Iver  
Gjerdalsv.3.  
N-3442 Hyggen  
NORVÈGE

Date of mailing (day/month/year) 31 January 2001 (31.01.01)	
Applicant's or agent's file reference	IMPORTANT NOTIFICATION
International application No. PCT/NO00/00090	International filing date (day/month/year) 15 March 2000 (15.03.00)
International publication date (day/month/year) 21 September 2000 (21.09.00)	Priority date (day/month/year) 15 March 1999 (15.03.99)
Applicant HANSEN, Iver	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
15 Marc 1999 (15.03.99)	19991252	NO	04 Octo 2000 (04.10.00)
31 Marc 1999 (31.03.99)	19974573	NO	12 Janu 2001 (12.01.01)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

Athina Nickitas-Etienne

Telephone No. (41-22) 338.83.38

# PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

## NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

HANSEN, Iver  
Gjerdalsv. 3  
N-3442 Hyggen  
NORVÈGE

Date of mailing (day/month/year) 11 January 2001 (11.01.01)	
Applicant's or agent's file reference	IMPORTANT NOTIFICATION
International application No. PCT/NO00/00090	International filing date (day/month/year) 15 March 2000 (15.03.00)
International publication date (day/month/year) 21 September 2000 (21.09.00)	Priority date (day/month/year) 15 March 1999 (15.03.99)
Applicant HANSEN, Iver	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
15 Marc 1999 (15.03.99)	19991252	NO	04 Octo 2000 (04.10.00)

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. (41-22) 740.14.35</p>	<p>Authorized officer</p> <p>Athina Nickitas-Etienne</p> <p>Telephone No. (41-22) 338.83.38</p>
---	---

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:

IPEA SE (PRV SWEDEN) FAX 0046 - 86677288.

# PCT

## CHAPTER II

### DEMAND

under Article 31 of the Patent Cooperation Treaty:  
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only																																																																
Identification of IPEA	Date of receipt of DEMAND																																																															
<table border="1"> <tr> <td colspan="2">Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</td> <td>Applicant's or agent's file reference</td> </tr> <tr> <td>International application No.</td> <td>International filing date (day/month/year)</td> <td>(Earliest) Priority date (day/month/year)</td> </tr> <tr> <td>PCT/NO 00/00090</td> <td>15 March 2000 (15.03.00)</td> <td>15. March 1999</td> </tr> <tr> <td colspan="3">Title of invention</td> </tr> <tr> <td colspan="3">TRANSCIVER SYSTEM FOR PORTABLE USE</td> </tr> <tr> <td colspan="3">Box No. II APPLICANT(S)</td> </tr> <tr> <td colspan="2">Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)</td> <td>Telephone No.:</td> </tr> <tr> <td colspan="2">HANSEN, IVER</td> <td>(+47) 31289000.</td> </tr> <tr> <td colspan="2">JERDAL,</td> <td>Car: (+47) 90 100 500.</td> </tr> <tr> <td colspan="2">N-3442 HYGGEN,</td> <td>Facsimile No.:</td> </tr> <tr> <td colspan="2">NORWAY.</td> <td>(+47) 31289001.</td> </tr> <tr> <td colspan="2">State (that is, country) of nationality:</td> <td>State (that is, country) of residence:</td> </tr> <tr> <td colspan="2">NORWAY</td> <td>NORWAY.</td> </tr> <tr> <td colspan="3">Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)</td> </tr> <tr> <td colspan="3" style="height: 100px;"> <div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div> </td> </tr> <tr> <td colspan="2">State (that is, country) of nationality:</td> <td>State (that is, country) of residence:</td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> <tr> <td colspan="3">Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)</td> </tr> <tr> <td colspan="3" style="height: 100px;"> <div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div> </td> </tr> <tr> <td colspan="2">State (that is, country) of nationality:</td> <td>State (that is, country) of residence:</td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> </table>		Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference	International application No.	International filing date (day/month/year)	(Earliest) Priority date (day/month/year)	PCT/NO 00/00090	15 March 2000 (15.03.00)	15. March 1999	Title of invention			TRANSCIVER SYSTEM FOR PORTABLE USE			Box No. II APPLICANT(S)			Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)		Telephone No.:	HANSEN, IVER		(+47) 31289000.	JERDAL,		Car: (+47) 90 100 500.	N-3442 HYGGEN,		Facsimile No.:	NORWAY.		(+47) 31289001.	State (that is, country) of nationality:		State (that is, country) of residence:	NORWAY		NORWAY.	Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)			<div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div>			State (that is, country) of nationality:		State (that is, country) of residence:				Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)			<div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div>			State (that is, country) of nationality:		State (that is, country) of residence:			
Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference																																																														
International application No.	International filing date (day/month/year)	(Earliest) Priority date (day/month/year)																																																														
PCT/NO 00/00090	15 March 2000 (15.03.00)	15. March 1999																																																														
Title of invention																																																																
TRANSCIVER SYSTEM FOR PORTABLE USE																																																																
Box No. II APPLICANT(S)																																																																
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)		Telephone No.:																																																														
HANSEN, IVER		(+47) 31289000.																																																														
JERDAL,		Car: (+47) 90 100 500.																																																														
N-3442 HYGGEN,		Facsimile No.:																																																														
NORWAY.		(+47) 31289001.																																																														
State (that is, country) of nationality:		State (that is, country) of residence:																																																														
NORWAY		NORWAY.																																																														
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)																																																																
<div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div>																																																																
State (that is, country) of nationality:		State (that is, country) of residence:																																																														
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)																																																																
<div style="position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div> </div>																																																																
State (that is, country) of nationality:		State (that is, country) of residence:																																																														
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.																																																																

Sheet No. 2

International application No.  
PCT/NO 00/00090

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The following person is ☐ agent ☒ common representative  
and ☐ has been appointed earlier and represents the applicant(s) also for international preliminary examination.  
☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.  
☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.

Name and address: (Family name followed by given name; for a legal entity, full official designation.  
The address must include postal code and name of country.)

HANSEN, IVER  
JERDAL,  
N-3442 HYGGEN,  
N O R W A Y.

Telephone No.: (+47) 31289000.

Cable: (+47) 90 100 500

Facsimile No.:

(+47) 31289001.

Teleprinter No.:

☒ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION**

Statement concerning amendments:\*

1. The applicant wishes the international preliminary examination to start on the basis of:

☐ the international application as originally filed

the description ☐ as originally filed

☒ as amended under Article 34

the claims ☐ as originally filed

☒ as amended under Article 19 (together with any accompanying statement)

☒ as amended under Article 34

the drawings ☐ as originally filed

☒ as amended under Article 34

2. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.

3. ☒ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). (This check-box may be marked only where the time limit under Article 19 has not yet expired.)

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: ENGLISH

☒ which is the language in which the international application was filed.

☐ which is the language of a translation furnished for the purposes of international search.

☐ which is the language of publication of the international application.

☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.

**Box No. V ELECTION OF STATES**

The applicant hereby elects all eligible States (that is, all States which have been designated and which are bound by Chapter II of the PCT)

excluding the following States which the applicant wishes not to elect:

Sheet No. 3

International application No.  
**PCT/NO 00/00090**

## Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |  |   |        |
|--|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34   | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter  |   | sheets |
| 6. other (specify)   |   | sheets |

For International Preliminary  
Examining Authority use only

received not received

- |                          |                          |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify):  |

## Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

*Iver Hansen* Iver Hansen, applicant.

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.☐ The applicant has been informed accordingly.4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:



## PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Hansen, Iver  
Gjerdalsveien 3  
N-3442 HYGGEN  
Norge

NOTIFICATION OF RECEIPT  
OF DEMAND BY COMPETENT INTERNATIONAL  
PRELIMINARY EXAMINING AUTHORITY

(PCT Rules 59.3(e) and 61.1(b), first sentence  
and Administrative Instructions, Section 601(a))

Date of mailing  
(day/month/year)

17-10-2000

Applicant's or agent's file reference

## IMPORTANT NOTIFICATION

International application No.

PCT/N000/00090

International filing date (day/month/year)

15-03-2000

Priority date (day/month/year)

15-03-1999

Applicant

Hansen, Iver

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

(MONDAY) 16-10-2000 (CHRISTINA WALL, IPEA, SWEDEN:  
WITHIN THE TIME LIMIT BECAUSE THE  
15.10.2000 WAS ON A SUNDAY)

2. This date of receipt is:

- ☒ the actual date of receipt of the demand by this Authority (Rule 61.1(b)).  
☐ the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).  
☐ the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **ATTENTION:** That date of receipt is **AFTER** the expiration of 19 months from the priority date. Consequently, the election(s) made in the demand does (do) not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)). Therefore, the acts for entry into the national phase must be performed within 20 months from the priority date (or later in some Offices) (Article 22). For details, see the *PCT Applicant's Guide*, Volume II.

- ☐ (If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/  
Patent- och registreringsverket  
Box 5055  
S-102 42 STOCKHOLM  
Facsimile No. 08-607 72 88

Telex  
17978  
PATOREG-S

Authorized officer

Hediye Gözel

Telephone No. 08-782 25 00

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

REC'D 11 JUN 2001

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WINDYNET	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/NO00/00090	International filing date (day month year) 15.03.2000	Priority date (day month year) 15.03.1999
International Patent Classification (IPC) or national classification and IPC H04M 1/05, H04B 1/38		
Applicant HANSEN, Iver		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  16.10.2000	Date of completion of this report  22.05.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer  Roland Landström/JAn Telephone No. 08-782 25 00

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

## I. Basis of the report

1. With regard to the **elements** of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement) under article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheet/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	<u>1-8</u>	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-8</u>	NO
Industrial applicability (IA)	Claims	<u>1-8</u>	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

The invention claimed in claim 1 relates to a portable transceiver (mobile phone) having wireless communication with a receiver or transceiver on an ear.

The invention is intended to solve the following problems:

Hands-free use,

Risk of loosing or damaging phone, while in pockets or on a belt, when sitting down or moving,

Ergonomic use of a keyboard, a display and a microphone,

Possibility of the receiver or transceiver on the ear falling off.

Claim 1 essentially suggests that the transceiver (phone) has adjustable means for carrying on the chest and/or ear, and means for adjusting the position and angle of a keyboard, a display and a microphone.

However, the claims, the description and the drawings fail to clearly reveal the constructive arrangements and function of the adjustable means for carrying on the chest and/or ear and the means for adjusting the position and angle of a keyboard, a display and a microphone.

.../...

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: BOX V

The following documents were cited in the International Search Report:

A: US 5 677 948 A  
B: US 5 346 111 A  
C: WO 98 06210 A1  
D: GB 2 317 301 A  
E: US 5 167 082 A

Document A (column 2, line 7 - column 3, line 32, figures 1 - 5, abstract) discloses a cordless transceiver (2) having carrying means (7) for positioning the transceiver (2) on the middle of the chest of the user. A radio receiver is arranged in an earpiece (6), see column 2, lines 50 - 52. The earpiece is fixed on the ear of a user by a coil (8). The position of a microphone (5) is adjustable by sliding a device (17) on the carrying means (collar 7).

The invention claimed in claim 1 differs from what is known from document A essentially in that the carrying means are adjustable, and that means are provided for adjusting the position and angle of a keyboard, a display and a microphone.

These variations are obvious to a person skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. The following reasons further display the obvious nature:

Carrying means having adjustable means, for example shoulder-straps and wrist belts, are well known.

It would be obvious to make the coil (8 in figure 2) of document A adjustable in size and shape to fit different ears.

It is well known, for example in telephones and computers, to provide means for adjusting the position and angle of a keyboard, display and microphone to improve the ergonomic or sound.

Therefore, the invention claimed in claim 1 lacks an inventive step.

.../...

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: BOX V

Document B (column 1, line 9 - column 2, line 18, figures 1 - 5, abstract) discloses carrying means (straps 7, 9) that are adjustable for positioning a personal computer, personal communicator (i. e. a computer combined with a mobile telephone) or a similar device (8) entirely on the middle of the chest of the user. The straps (7, 9) have a plurality of female snap portions and the device (8) has mating male snap portions, see column 2, lines 6 - 8. Hence, the user can adjust the position and angle of the communicator (8), which obviously has a keyboard, a display and a microphone.

The invention claimed in claim 1 differs from what is known from document B, essentially in that a transceiver may be attached on the ear of the user.

However, document D (page 4, line 6 - page 17, line 1, figures 1 - 16, abstract) discloses a hands-free accessory comprising a transceiver, an earphone and a microphone, for fastening on an ear.

Therefore, the invention claimed in claim 1 lacks an inventive step.

It would be obvious to combine the transceiver with other objects or accessories in a common casing as suggested in claims 2 and 8 as the advantages thus achieved can be readily contemplated in advance. Furthermore, document C (figure 1, abstract) discloses a mobile telephone having a built-in remote controller for controlling a television set or a computer. Besides, the combinations obtain no unexpected effect.

The invention according to claims 3 - 5 is obvious to a person skilled in the art for the following reasons:

Document A (column 2, line 7 - column 3, line 32, figures 1 - 6, abstract) discloses a cordless transceiver (2) communicating with an earpiece (6) via a cable (12) or by radio.

Document D (page 4, line 6 - page 17, line 1, figures 1 - 16, abstract) discloses a foldable headset (handset 200) that wirelessly communicates with a mobile telephone body (100).

Earphones having pressure equalisation passages are well known.

.../...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: BOX V

The invention claimed in claims 6 - 7 is obvious to a person skilled in the art for the following reasons:

Document E (column 2, line 13 - column 3, line 62, figures 1 - 4, abstract) discloses a shoe having an electric generator (2 in figure 1, 25 in figure 4) and a capacitor (C1 in figure 4) for recharging batteries (B1, B2) to operate a portable wireless telephone (column 2, lines 30 - 35).

The invention claimed in claim 7 differs from what is known from document E essentially in that by walking, fluid or air from compartments in the soles is moved through tubes to the generator. This variation is obvious to a person skilled in the art.

Consequently, the invention claimed in claims 2 - 8 lacks an inventive step.

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The description does not disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art (PCT Article 5).

The claims are not drafted in a "clear and concise" manner as is called for in PCT Article 6. Further, the claims do not contain a "definition of the matter for which protection is sought...in terms of the technical features of the invention"... "stating concisely the technical features which...it is desired to protect" as is called for in PCT Rule 6.3(a) and 6.3(b). Stating a number of alternative or possible design features, as in the present claims 1 - 2 and 8, can not be considered as "defining" the invention, but is instead unclear as to what design features the sought protection in fact refers to.

The problem as formulated in claim 1 does not alone imply a means for the solution to the problem. Therefore, the means for solving the problem must be specified in the claim (Article 6 and Rule 6).

Claim 1 does not specify the constructive arrangement and function of the adjustable carrying means for adjustable positioning of the transceiver firmly on the chest or on the ear of the user, and the means for moving some components like a keyboard, display, and microphone to a more protruding and suitable angle, distance and stable position for easy operation by the user.

Claim 1 is obscure considering it does not clearly reveal what is carried on the chest.

Claim 1 is obscure considering it does not reveal the meaning of the expression "chest apparatus".

Claim 4 is obscure considering it does not reveal the constructive arrangement for providing an ear transceiver that is adjustable to the size and shape of the user's ear.

In claim 6, it is unclear where the example beginning with the expression "for instance by rotating weights" ends.

In claims 6 and 7, it is unclear what is meant by the expression "condensers/cinetics".

.../...



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00090

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box VIII

Claim 8 is obscure considering it does not reveal the constructive arrangement of the transceiver for providing a space for the accessories.

The following words are obscure as it is unclear what is included:

"some components like", "etc." (claim 1), "other objects, for instance", "etc." (claim 2), "like", "etc.", "things for everyday use" and "other things like" (claim 8).

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>H04M 1/05, H04B 1/38</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 00/56041</b> <b>(43) International Publication Date:</b> 21 September 2000 (21.09.00)									
<b>(21) International Application Number:</b> PCT/NO00/00090 <b>(22) International Filing Date:</b> 15 March 2000 (15.03.00)  <b>(30) Priority Data:</b> <table border="0"><tr><td>19991252</td><td>15 March 1999 (15.03.99)</td><td>NO</td></tr><tr><td>19991252</td><td>16 March 1999 (16.03.99)</td><td>NO</td></tr><tr><td>19974573</td><td>31 March 1999 (31.03.99)</td><td>NO</td></tr></table> <b>(71)(72) Applicant and Inventor:</b> HANSEN, Iver [NO/NO]; Gjerdalsv. 3, N-3442 Hyggen (NO).		19991252	15 March 1999 (15.03.99)	NO	19991252	16 March 1999 (16.03.99)	NO	19974573	31 March 1999 (31.03.99)	NO	<b>(81) Designated States:</b> AT, AU, BA, BB, BG, BR, BY, CA, CH, CU, CZ, DE, DK, EE, ES, FI, GB, HU, ID, IL, IS, JP, KP, KR, LR, LU, LV, MK, MX, NO, NZ, PL, PT, RO, RU, SE, SG, TR, TT, US, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
19991252	15 March 1999 (15.03.99)	NO									
19991252	16 March 1999 (16.03.99)	NO									
19974573	31 March 1999 (31.03.99)	NO									
<b>(54) Title:</b> TRANSCEIVER SYSTEM FOR PORTABLE USE  <b>(57) Abstract</b>  Transceiver system for portable use having interchangeable components and adjustable means for carrying and operation.											

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon	KR	Republic of Korea	PL	Poland		
CN	China	KZ	Kazakstan	PT	Portugal		
CU	Cuba	LC	Saint Lucia	RO	Romania		
CZ	Czech Republic	LI	Liechtenstein	RU	Russian Federation		
DE	Germany	LK	Sri Lanka	SD	Sudan		
DK	Denmark	LR	Liberia	SE	Sweden		
EE	Estonia			SG	Singapore		

## TRANSCIVER SYSTEM FOR PORTABLE USE

This invention relates to personal portable transceiver system especially for persons needing hands free operation due to driving, work, walking and carrying things etc.

Having some health problems due to air pollution etc., the inventor has been experimenting for years making portable air purifiers and other portable devices. By doing so, he also gradually developed special means for comfortable carrying of heavy combinations on user's chest and for easy operation of such combinations at various angles and distances required by different situations of everyday life. Transceivers, mobile phones and PCs on the market can be put in brief cases, bags, on belts and in pockets, but the inventor found that no such apparatus on the market offered satisfactory adjustability regarding positioning means.

To meet the need for hands free transceivers or mobile phones, there are some devices available. However, most have the common disadvantage that wires and components obstruct operators movements and are too quickly torn. A loudspeaker on the dashboard of a car is too often subdued by noisy traffic etc.

Not yet ready for sale on the market is the Swedish so called "blue tooth" T28 World Ericsson mobile phone. According to last brochures in March 2000, it consists of a mobile phone to be put in a user's pocket or belt and a transceiver on the user's ear having no wires between the two components. It is a step forward, but problems arise when users for instance are exercising or doing work requiring vigorous body movements. The component to be put on the user's ear is likely to fall off because it cannot be tightened satisfactorily to the ear. "T28 World" only has a flexible fastening device for user's ear. A microphone arrangement on the user's cheek cannot be folded back on the ear and will consequently be too disturbing for all day use. It also feels somewhat uncomfortable to have components in pockets or on a belt. Especially when sitting down often or moving around in crowded places and narrow rooms there is a risk of losing or damaging the apparatus.

According to the present invention, there is provided personal portable transceiver system comprising:

A unit arranged to contain a wireless transmitter, a wireless receiver, a keyboard, a display, an antenna, a microphone, a listening device/loudspeaker, characterized in that said system is having special carrying means adjustable for being positioned entirely and firmly on the middle of the chest of the user, respectively on the ear of the user, optionally on both the chest and on the ear at the same time when the ear bow is used only as a receiver of sound from the chest apparatus, said system thereby facilitating hands-free operation when needed, said system also characterized by having means for moving some components like keyboard, display, microphones etc. to a more protruding and suitable angle, distance and stable position for easy operation by the user. Optionally also arranged to contain a portable, adjustable air conditioner, a flashlight, a regular radio, things for everyday use, remote control of other things etc. The transceiver on the chest of the user may also be combined with things like a small PC, TV, a magnifying glass for display enlargement, a transmitter of sound to the user's ear to avoid wires, a folding small desk, tray, remote control for a larger PC, larger TV, heating, lights, ventilation, robots etc. To facilitate hands-free use, the above mentioned components may be activated by user's voice or by touching symbols on the display of the apparatus. A good portable TV picture depends very much on where the portable TV is positioned. A pile of books under the TV might solve the problem, but are not always available. The positioning mechanism facilitates hands free use of the small portable TV almost everywhere. A suitable, stable position for satisfying picture quality is usually quickly reached. To meet user's varying needs and situations of everyday life, the system described here have a set of interchangeable components. Consequently, this system preferably includes:

- A. A transceiver on the middle of the user's chest having adjustable means for carrying, operation and accessories and a receiver on user's ear, which by adjustable means may be tightened for a stable and comfortable use on one or both of user's ears.

- B. For occasional light weight use in special situations like repair work under a car or when being in the bath room etc.: A complete lightweight transceiver or mobile phone, which by adjustable means may be tightened for a stable and comfortable use on user's ear.
- C. When driving a car, some might prefer a complete transceiver only positioned on user's chest, having a loudspeaker and microphone and adjustable means for carrying, operation and accessories.

The apparatus in accordance with the invention is hereby described more closely by referring to exemplary embodiments thereof and with reference to the enclosed drawings wherein:

The fresh air transceiver may be operated by keyboard (30) or voice activated.  
Fig. 1 shows: <sup>E.g.</sup> (Scale 1:1 up to scale 1:2).

Ball shaped, adjustable fan casing for wind direction (1),

Fan (32), electromotor (33), elastic noise reducing material (34), fan inlet ring (35).

Friction adjustment ring (12) (+friction seal ring (17) when needed).

(Compartment (2) for <sup>color (or black/white)</sup> hands free low radiation picture phone, PC, TV, alarm and picture surveillance system etc., Antenna (13), protruding fastening means (6) <sup>or by magnet in apparatus</sup> V.

listening means (4) allowing wireless transmission to adjustable ear bow transceiver (21) <sup>optionally extra</sup> loudspeaker (18), vertical strap (22) for stabilizing

position of apparatus, folding microphone (5) <sup>rectangular</sup> dust filter (8) <sup>lid for batteries or air outlet (44)</sup>, active coal filter (9), braces (7) arranged to enable user

to carry heavy combinations without discomfort, light (14), radio (15), compartment (16) <sup>E.g.</sup> for beeper for hearing/tracking (optional)

e.g. when apparatus lost/stolen, rechargeable battery <sup>(e.g. by the arm pit: (3) rubber band, weld, glue or)</sup> socket for wire (11) for power/recharging battery, lower belt (10), buckle (105), keyboard for mobile phone (19) in retracted position, springs (28),

band for keeping braces/straps in position below chin (20) with or without apparatus. Magnifying glass (23) <sup>E.g.</sup> adjustable 6cm x 6cm,

for seeing keyboard, display, TV, PC etc. more easily (optional).

Fastening pin (43) for <sup>E.g.</sup> Magnifying glass may also be fastened to detachable part of apparatus when using it on a table, on user's lap etc. making ~~small TV-picture, PC-picture,~~ mobile phone picture etc. look larger. The display may on

some models be tilted upwards from apparatus to facilitate viewing. The apparatus may also have a loudspeaking function (18) for phone conversations etc. Joints and movable arms (24) may

include springs, steel balls or rubber discs, grooves, hydraulics etc. to create friction and adjustability. Movable grating (29).

Water tight protecting case/cover with transparent cover (optional) over keyboard (preferably) and openings for air outlet, plugs.

Microphone (5) (Folding cover or mic outside cover with a protecting cap or microphone stick as a prelengthening of the listening means) <sup>movable arms</sup> Angle-regulator (24) for quicker and easier observation of keyboard (30), display (31) or by hydraulics or other

fastening arrangement offering varying angles, distances etc. from the user. Color display for functions above. Optionally also camera included. Knob (25) for air stream direction.

PATENTSTYRET, Oslo, Avs: Iver Hansen, Gjerdalsv. 3, 3442 Hyggen.  
PORTABLE AIR CONDITIONER COMBINED WITH TRANSCEIVER ETC.

Protruding chest pads or pockets (26) stabilizing apparatus  
 and making apparatus look less protruding. Battery charging shoes (27).

(30)  
 Keyboard may optionally be remote control for larger TV,  
 larger PC, larger TV/PC combinations, future self moving means  
 like lawn mowers, vacuum cleaners, window cleaners, food servers,  
 musical instruments, heating ovens, garage doors, house doors,  
 venetian blinds, curtains, kitchen appliances, lamps, robots,  
 ventilation and for other means suitable for remote control.  
 Keyboard (30) also for calculator and for programming voice  
 activation. Extra spring (36) on one side when needed.

Apparatus may also function as a future guide for drivers, seamen,  
 tourists, hikers in rural areas etc. by being linked to  
 satellite navigation systems or other systems facilitating  
 travelling. By programming or telling apparatus destination  
 and position, drivers may get instructions through the ear bow (21)  
 whether to turn left, right or go straight ahead when driving  
 in large towns. A good central administration of such a system  
 will counteract traffic jams and facilitate a much quicker and  
 better distribution of traffic on the roads.

For tourists the voice activated apparatus may also function as  
 a translator. Languages spoken to the users may in the future  
 quickly be translated to the user's language through the ear bows  
 without using dictionaries.

Small TV cameras or detectors/sensors may be mounted by the rear  
 and front bumpers of vehicles and thereby transmit information  
 regarding distance to obstacles and show it on the display (31)  
 for easier parking and driving. Other cameras in the vehicle  
 may be used for surveillance when drivers leave their car and  
 want to see and listen to make sure that nothing is stolen.  
 Similar surveillance of home, cabin, boat, office etc.

A world wide telephone directory information system may also be  
 available through this apparatus. Ring (44) to be fastened on a  
 fastening hook (37). <sup>Can be regulated by</sup> adjustment screw (39) for movable arms ~~(23)~~ (24).

Rubber/frictional portion (40). Fan speed regulator (41) <sup>optionally</sup> ~~motors~~ or  
 holes (42) for angle adjustment of apparatus in protruded position.



PATENTST/RET. Oslo. Ays: 1. Hansen. Gjeddesv. 3. 3442 Hyggen.

Means for attachment of accessories (46). Grooves (47) for  
air inlet. Lid (48) for access to fan. Lid (45) covering  
batteries. Optional angle limitation/arm movement stop (49).

Case/housing (50) for positioning mechanism. *Hand... means (50)*

*Control... (52 a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z)*

*Safety... (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)*

*knob (101) for moving and holding of the... (102) (103) (104) (105) (106) (107) (108) (109) (110) (111) (112) (113) (114) (115) (116) (117) (118) (119) (120) (121) (122) (123) (124) (125) (126) (127) (128) (129) (130) (131) (132) (133) (134) (135) (136) (137) (138) (139) (140) (141) (142) (143) (144) (145) (146) (147) (148) (149) (150) (151) (152) (153) (154) (155) (156) (157) (158) (159) (160) (161) (162) (163) (164) (165) (166) (167) (168) (169) (170) (171) (172) (173) (174) (175) (176) (177) (178) (179) (180) (181) (182) (183) (184) (185) (186) (187) (188) (189) (190) (191) (192) (193) (194) (195) (196) (197) (198) (199) (200)*

## C L A I M S

1. Transceiver system for personal and portable use, characterized in that said system is having carrying means (7,20,51,44,37,22,26,10,10B) sufficiently adjustable for being positioned ~~entirely and firmly~~ on the middle of the chest of the user, <sup>(1D,52A)</sup> respectively on the ear ~~(21,52a-h)~~ of the user, optionally on both the chest and on the ear <sup>(18D)</sup> at the same time when the ear <sup>(18D)</sup> is used only as a receiver of sound from the chest apparatus, said system thereby ~~facilitating hands-free operation when needed,~~ said system is also having means <sup>(24,39,28,40,56,55)</sup> for moving some components like keyboard, display, microphones etc. to a more protruding and suitable angle, distance and stable position for easy operation by the user.
2. System as claimed in claim 1, wherein said apparatus is also arranged to contain other objects, for instance a portable air conditioner, flashlight, radio etc.
3. Transceiver as claimed in claim 1, wherein said apparatus contains a wireless transmitter of sound to a ~~receiver~~ <sup>receiver</sup> arranged to be fastened to an ear <sup>(21)</sup>.
4. Transceiver as claimed in claim 3, wherein said ear transceiver is adjustable to the size and shape of the user's ear and also allows some air passage to user's external auditory meatus.
5. Transceiver as claimed in claim 4, <sup>ear</sup> wherein said <sup>ear</sup> transceiver has a microphone which may be unfolded towards the user's mouth during phone conversations and folded back on the ear transceiver when not in use.

## CLAIMS, continued:

FORSLING A:

6. Transceiver as claimed in claim 1,

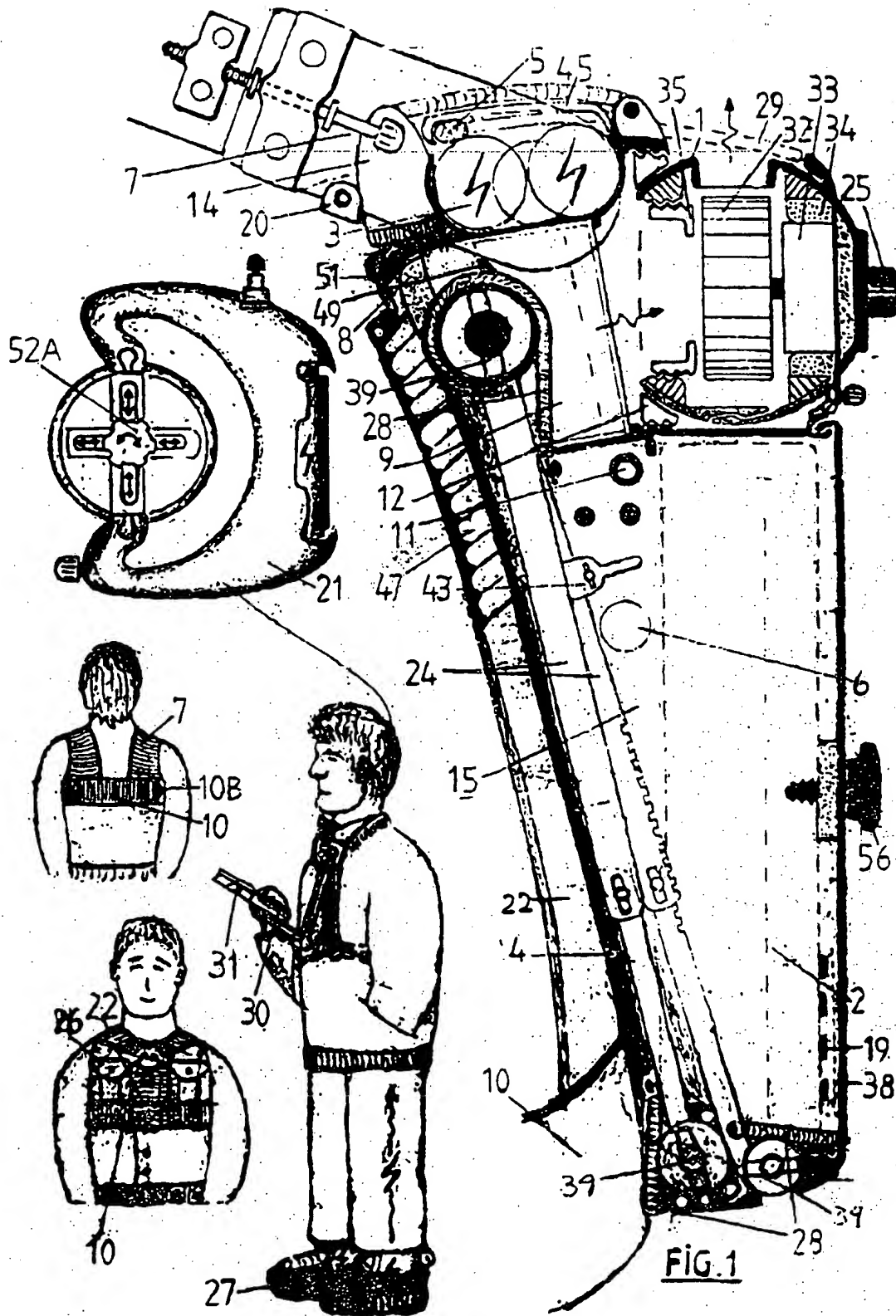
wherein the batteries of said apparatus may be recharged by utilizing body movements and body functions to transform such energy into electric power, for instance by rotating weights in the heels or sides of footwear, said weights tightening springs connected to and activating small dynamos and condensers/capacitors, said dynamos/condensers/capacitors connected by wire to rechargeable batteries which are thereby recharged or energized.

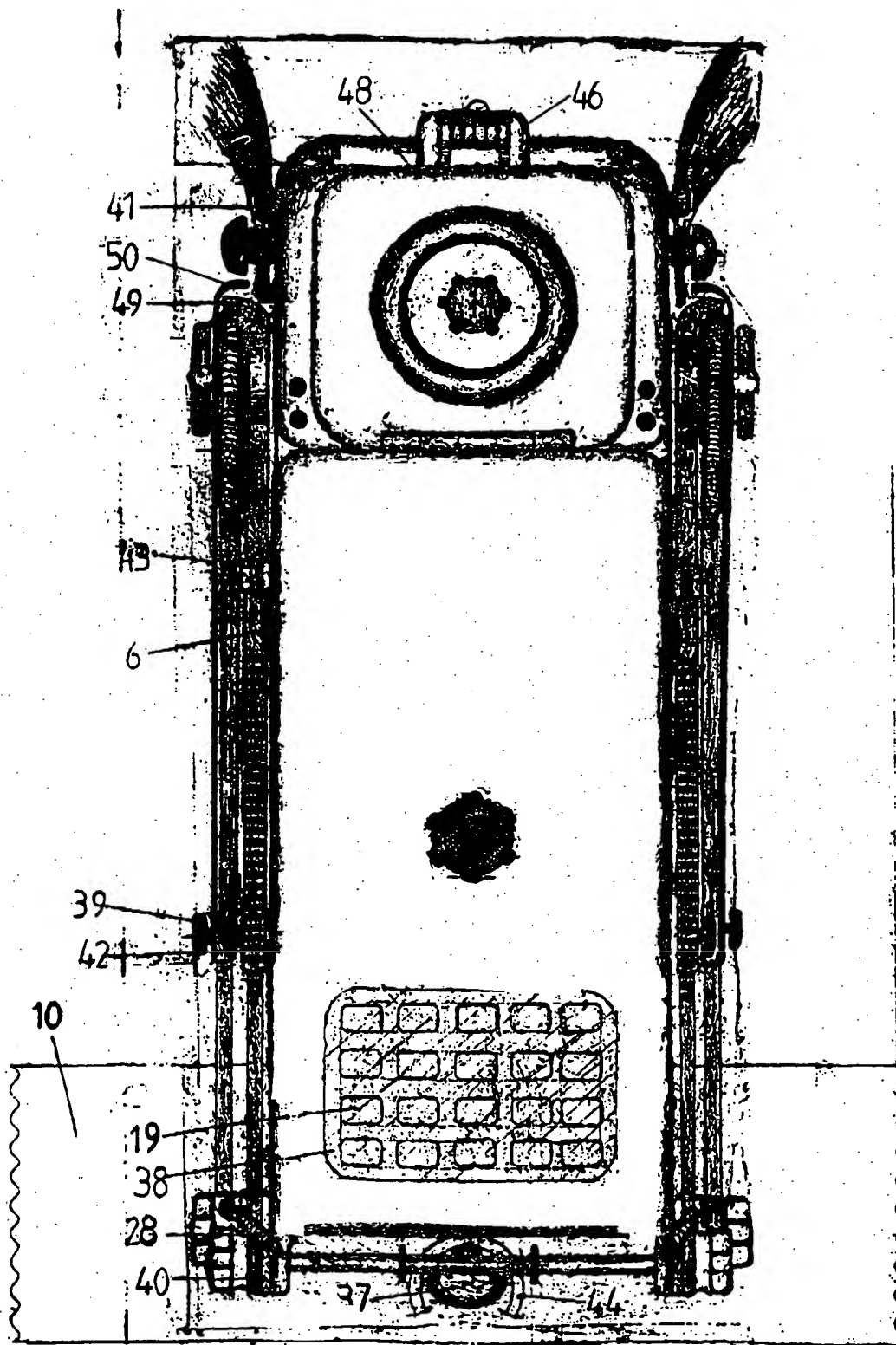
7. Transceiver as claimed in claim 6,

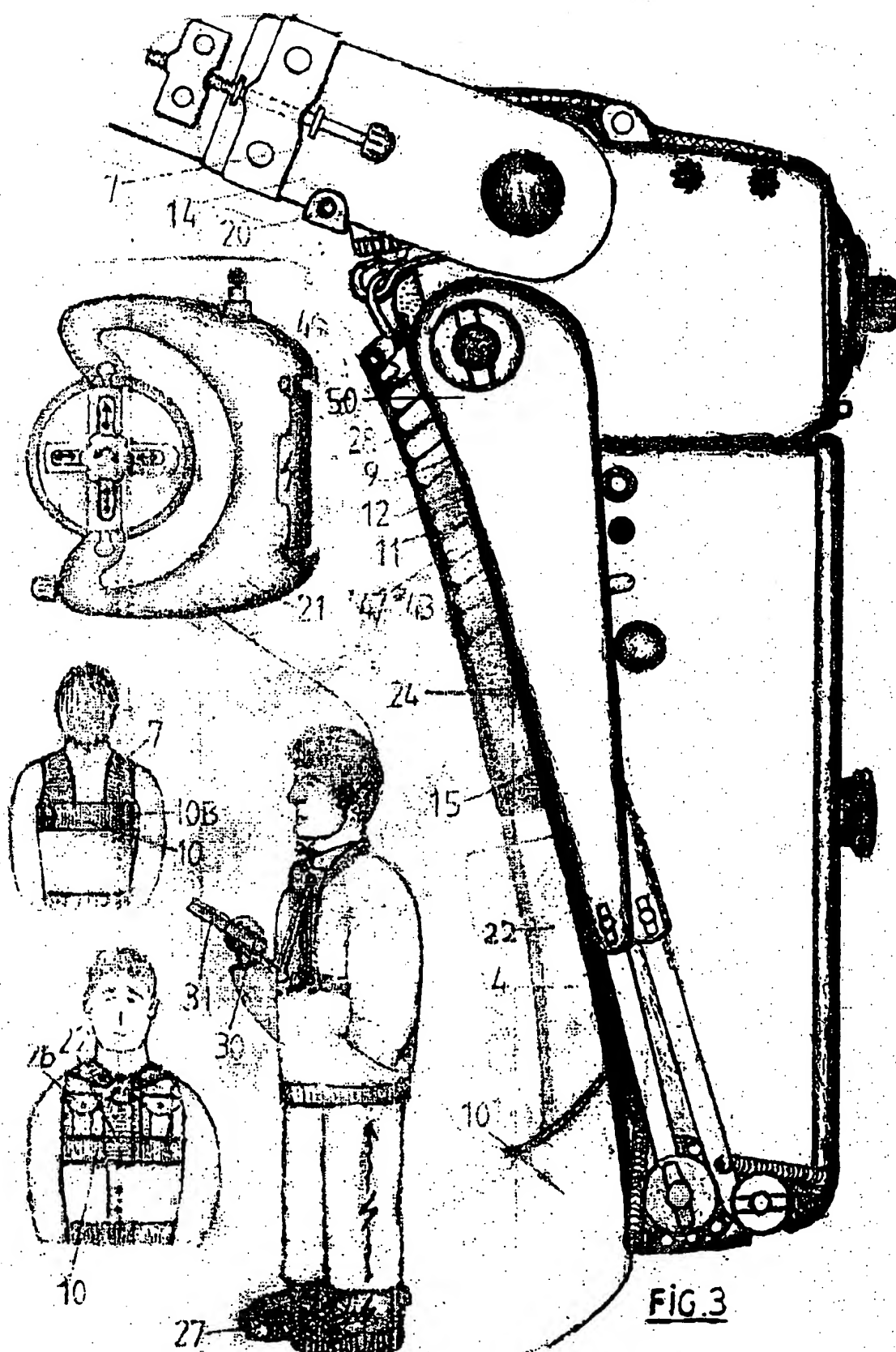
wherein fluid or air from compartments in the soles of footwear by walking is moved through tubes to small dynamos/condensers/capacitors, said dynamos/condensers/capacitors thereby activated and charging batteries.

8. Transceiver as claimed in claim 1,

wherein said apparatus is arranged to contain accessories like a voice activated transceiver, a transceiver which may be activated and operated by touching the display of the transceiver and operation by use of a keyboard, an alarm and surveillance system for home, office, car etc., said system may also include information regarding potential intruders weight, height, voice and eye analysis and x-ray-like information, a small radio, PC, TV, long life "Sapphire" battery/flashlight, camera, means for recording and reproducing sound and picture, a small music instrument, tools, magnifying glass, purse, tray, desk, things for everyday use, means for remote control of other things like larger TV, PC, heating, lights, ventilation, robots etc.

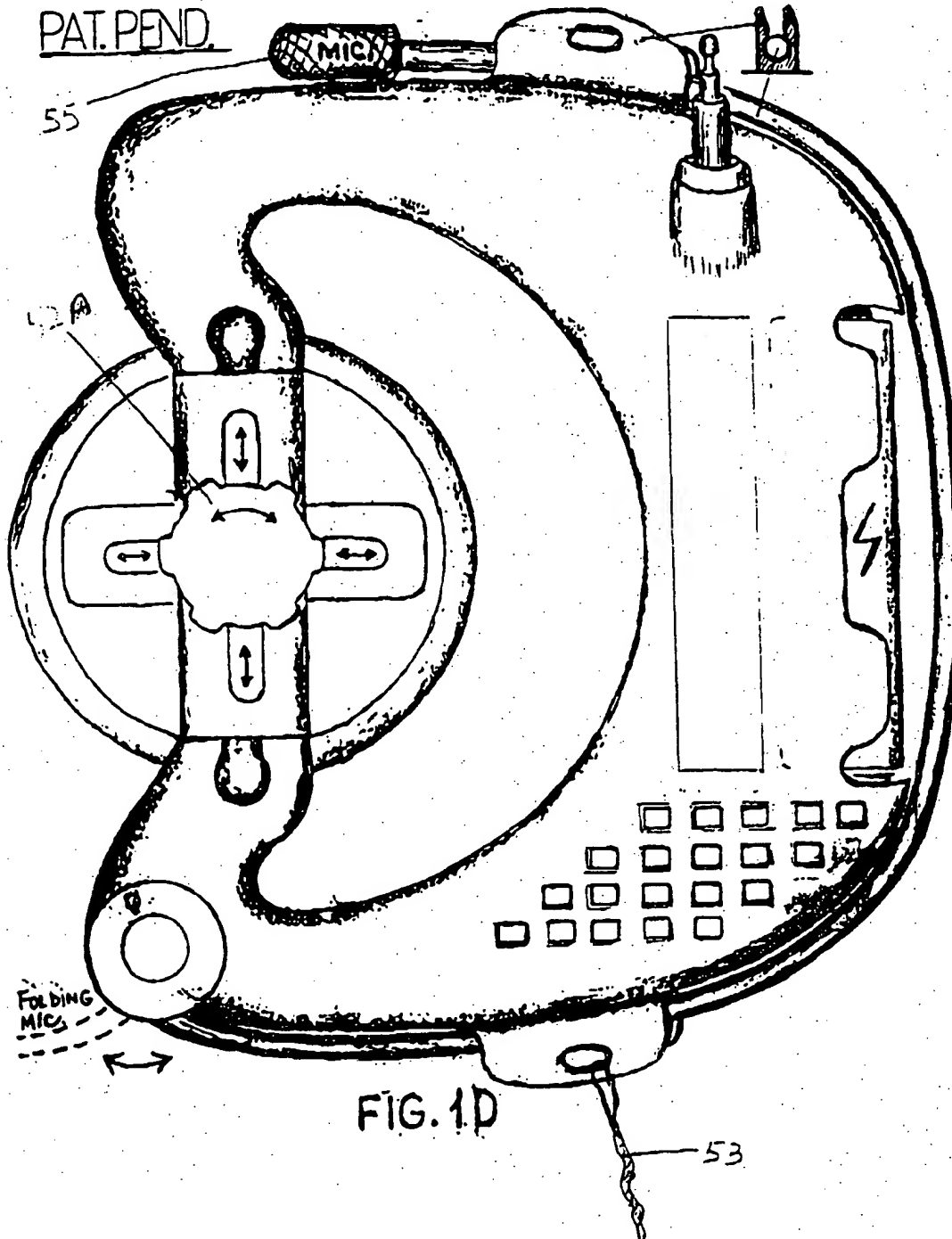


**FIG. 2**

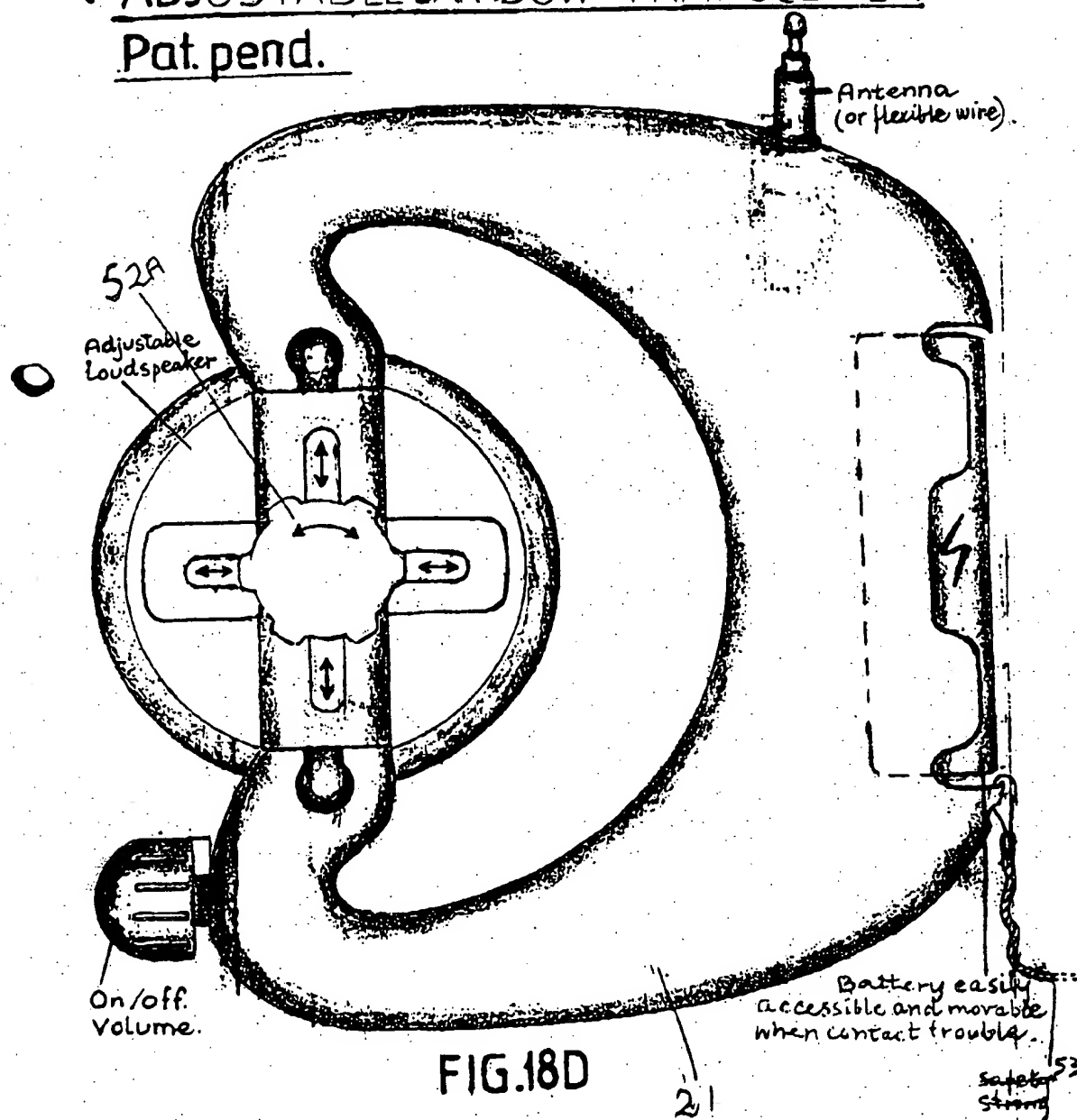


WIRELESS, HANDS FREE, LIGHT WEIGHT, VOICE ACTIVATED.  
ADJUSTABLE EAR BOW TRANSCIVER

PAT. PEND.



WIRELESS  
✓ ADJUSTABLE EAR BOW TRANSCEIVER  
Pat. pend.





(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
21 September 2000 (21.09.2000)

PCT

(10) International Publication Number  
**WO 00/56041 A3**

(51) International Patent Classification<sup>7</sup>: H04M 1/05,  
H04B 1/38

(21) International Application Number: PCT/NO00/00090

(22) International Filing Date: 15 March 2000 (15.03.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
19991252 15 March 1999 (15.03.1999) NO  
19991252 16 March 1999 (16.03.1999) NO  
19974573 31 March 1999 (31.03.1999) NO

(71) Applicant and

(72) Inventor: HANSEN, Iver [NO/NO]; Gjerdalsv. 3,  
N-3442 Hyggen (NO).

(81) Designated States (*national*): AT, AU, BA, BB, BG, BR,  
BY, CA, CH, CU, CZ, DE, DK, EE, ES, FI, GB, HU, ID,  
IL, IS, JP, KP, KR, LR, LU, LV, MK, MX, NO, NZ, PL, PT,  
RO, RU, SE, SG, TR, TT, US, YU.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent  
(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent  
(AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  
MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

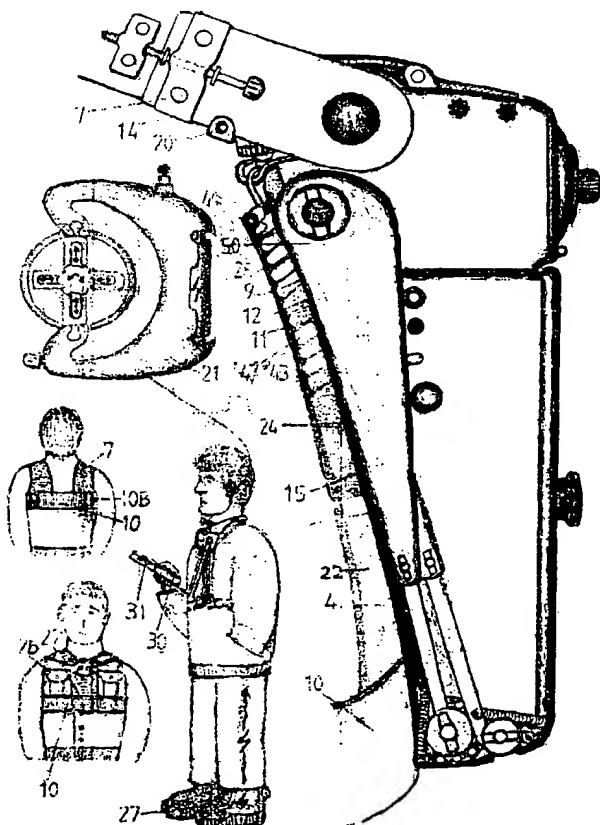
— With international search report.

(88) Date of publication of the international search report:  
11 January 2001

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: TRANSCEIVER SYSTEM FOR PORTABLE USE

(57) Abstract: A Transceiver system for portable use has adjustable means for carrying on the chest and/or the ear of the user. The system also has means for moving some components for easy operation by the user.



WO 00/56041 A3

# INTERNATIONAL SEARCH REPORT

1

International application No.

PCT/NO 00/00090

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04M 1/05, H04B 1/38

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04B, H04M, H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5677948 A (P.-A. MEISTER), 14 October 1997 (14.10.97), column 2, line 7 - column 3, line 32, figures 1-5, abstract	1
Y	--	2-8
X	US 5346111 A (J.B. HUNTLEY ET AL), 13 Sept 1994 (13.09.94), column 1, line 9 - column 2, line 18, figures 1-5, abstract	1
Y	--	2-8
Y	WO 9806210 A1 (LOPATTA, A.), 12 February 1998 (12.02.98), figure 1, abstract	2,8
	--	

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

1 Sept. 2000

Date of mailing of the international search report

06-09-2000

Name and mailing address of the ISA

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Roland Landström / MRo

Telephone No. +46 8 782 25 00

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 2317301 A (SEONG-SOO KIM), 18 March 1998 (18.03.98), page 4, line 6 - page 17, line 1, figures 1-16, abstract  --	3-5
Y	US 5167082 A (SHI-HIU CHEN), 1 December 1992 (01.12.92), column 2, line 13 - column 3, line 62, figures 1-4, abstract  -- -----	6-7

# INTERNATIONAL SEARCH REPORT

Information on patent family members

08/05/00

International application No.

PCT/NO 00/00090

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
US	5677948	A	14/10/97	CN	1119381 A	27/03/96
				EP	0698984 A	28/02/96
				FR	2724080 A,B	01/03/96
				JP	8079349 A	22/03/96
-----						
US	5346111	A	13/09/94	NONE		
-----						
WO	9806210	A1	12/02/98	DE	19630857 A	05/02/98
				DE	29617734 U	05/12/96
-----						
GB	2317301	A	18/03/98	CN	1176569 A	18/03/98
				DE	19706335 A	02/04/98
				GB	9703480 D	00/00/00
				JP	2918510 B	12/07/99
				JP	10107881 A	24/04/98
				US	5943627 A	24/08/99
-----						
US	5167082	A	01/12/92	GB	2263618 A	04/08/93
-----						